



# Powerfully Cool

## in Urban Infrastructure

### ALWAYS COLDER



Feel the deep cooling difference instantly with Airbitat Urban Cooler. Powered by our 3-step Reevac® Deep Cooling technology, the Urban Cooler is always 50% more effective in delivering cool air than conventional evaporative cooler.

### ALWAYS SUSTAINABLE



Reevac® Deep Cooling technology amplifies the way nature cools, through the natural processes of evaporation. With no chemical refrigerants, CFCs, no energy-hungry compressors and no waste heat generation, the Urban Cooler is energy-efficient, environmentally friendly and sustainable to operate.

### ALWAYS QUIET



The Airbitat Urban Cooler is designed to be quiet yet powerful. With streamlined airflow paths and high efficiency low-noise German-engineered fans that are fully encapsulated, the Airbitat experience is one that is truly cool, but never noisy.

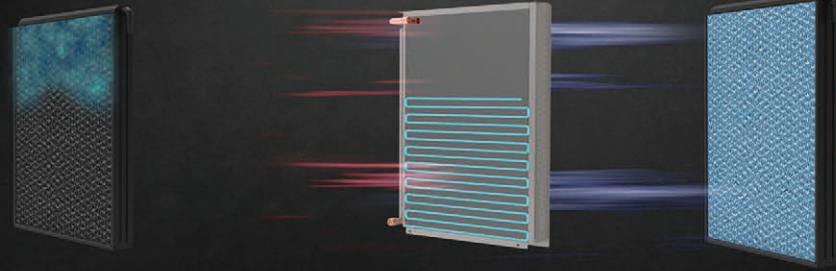
URBAN COOLER

AIRBITAT

# The Reevac® Deep Cooling Technology

## Experience deep cooling that is always colder

Other coolers can be limited in its cooling impact. But with the Urban Cooler, you will feel the deep cooling difference instantly. With our unique **Reevac® Deep Cooling** technology, it is always 50% more effective in delivering cool air than conventional evaporative cooler, in every environment.



### Step 1 Creating cold water

Cold water is created by evaporation within the Urban Cooler to generate a reservoir of cold water to supercharge the cooling cycle.

### Step 2 Rapid cooling

With the cold water created, it fuels the ultra-efficient heat exchanger, rapidly transforming the ambient air to a cooler temperature.

### Step 3 Deep cooling

The cooled air then passes through a second stage of evaporation, emerging as deeply cooled air streams.

## Always 50% more effective than conventional evaporative coolers

Powered by **Reevac® Deep Cooling** technology, the Urban Cooler delivers unparalleled cooling performance that is 50% more effective versus conventional coolers. Ideal for cooling open spaces, it provides relief from urban heat even in the most challenging environments.

### Mediterranean Summer



### Airbitat in other climates

#### Tropical Summer 60% Relative Humidity

Ambient	Conventional	Airbitat
32°C	27.3°C	24.7°C

Carbon Emissions Savings of 61.2%

#### Arid Summer 30% Relative Humidity

Ambient	Conventional	Airbitat
38°C	27.7°C	22.2°C

Carbon Emissions Savings of 81.7%

## Energy saving and eco-friendly

The Urban Cooler is designed to be energy-efficient and eco-friendly from day one. With no energy-hungry compressors, it consumes up to 80% less electricity than air-conditioning of a similar capacity, and it does not generate any waste heat to the environment. The Urban Cooler also delivers sustainable deep cooling without the use of chemical refrigerants and CFCs, or emissions of harmful chemicals. It is environmentally-friendly and sustainable to operate.



Up to 80% energy savings



No waste heat



Eco-friendly



## Powerful large-scale cooling

The Urban Cooler delivers a large cooling capacity of up to 226,560 BTU/hr, and distributes fresh cool air evenly to a targeted space. With its versatile air distribution system, flexible building management integration and a variety of access control modes, you can choose to extend, focus or distribute cooling for effective use in your space.



## Customised air delivery

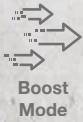
Every space has its unique cooling needs. With the Urban Cooler, you can design and configure air delivery for your cooling needs from overhead or embedded options, with nozzles, slats or adjustable louvers.

## Smart operations, smart savings

When Smart Mode is activated, the Urban Cooler detects ambient conditions and automatically switches between Fan Mode and Boost Mode, delivering tangible energy savings that is both good for business and for the environment.



Fan Mode



Boost Mode



Smart Savings



## Control it your way

The Airbitat Urban Cooler is designed to be controlled easily onsite via integration with available Building Management Systems or using a standalone Smart Control Bluetooth App. Advanced controls such as offsite control, fleet management and performance monitoring are available via a web dashboard.



On-site Control



Web Control



Performance Monitoring

## The Airbitat Urban Cooler is:



### Easy to integrate

Urban Coolers are designed for easy integration with minimal operation requirements such as:

- Connection to 3-phase power supply
- Access to a water supply
- Access to a drain point

\*Our technical team will conduct a site recce to consult on right-siting of product as well as integration requirements.



### Built tough

Durable and robust to weather outdoor conditions.



### Easy to maintain

Fuss-free maintenance with removable panels for easy rinsing.



### Product of Singapore

Wholly innovated, engineered and designed in Singapore.



### 365 days of surety

Comes with one year limited warranty for labour and parts.

## Specifications:

Model No.	UBC01			
Air flow	(m <sup>3</sup> /h)	9,000		
Cooling capacity*	(kW)	26.6 <sup>1</sup>	52.7 <sup>2</sup>	66.4 <sup>3</sup>
	(Ton)	7.5	14.9	18.8
	(Btu/hr)	90,600	179,820	226,560
COP	-	12.6	25.1	31.6
Power supply	(V)	380 - 455, 3-phase		
Frequency	(Hz)	50 / 60		
Current	(A)	3.8 (0.8 p.f.)		
Power consumption	(kW)	2.1		
Weight (Dry / Wet)	(kg)	380 / 500		
Dimensions (L x W x H)	(mm)	1350 x 1350 x 2300		

\*Based on outdoor ambient condition of: <sup>1</sup>34°C/50%RH | <sup>2</sup>38°C/21%RH | <sup>3</sup>46°C/16%RH



## Frequently Asked Questions:

### Where does the Urban Cooler work best?

The Urban Cooler works best in well ventilated spaces. These can include commercial spaces – such as semi-open urban areas, educational facilities, and public facilities; or even in industrial spaces such as large factories and hangars.

### What is required to operate the Urban Cooler?

A three-phase power source and minimum 1-bar pressure water-inlet is required. A water discharge point is also necessary as the system automatically discharges any excess water at the end of operations.

### What is the area of coverage?

The area of coverage is around 40sqm.

### What type of maintenance is required?

The Urban Cooler requires a thorough cleaning of internal components once every 6 months. For pre-filters, which are attached to the removable grilles, we recommend that it should be washed regularly depending on the ambient condition in which the Airbitat Cooler is installed.

### Must the Urban Cooler be roof mounted?

The Urban Cooler can be placed on any flat surface on the roof or floor. The cold air can then be delivered through a series of ducts to the desired space. Please email us at [airbitat.sales@stengg.com](mailto:airbitat.sales@stengg.com) to help you work out the best option.

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For enquiries, please email us at [airbitat.sales@stengg.com](mailto:airbitat.sales@stengg.com), or visit [www.airbitat.com](http://www.airbitat.com) for more information.